The kindest assistance was offered me by the gentlemanly officers of Fort Vancouver, but could not lead me into the course which my enthusiastic mind had marked out, and from there all communication by letter was tedious and uncertain. I concluded to return to Europe and engage anew, after having gained some useful experience.

In February, 1844, I left the mouth of the Columbia River for the Sandwich Islands, and proceeded from there to Chile, touching the Paradise of the Pacific (Otaheite), then in a state of siege. I arrived in Hamburg in November of the same

vear.

In the short space of my absence, family circumstances had taken a change, that made my presence there, at least for several years, necessary. So the course nearest my heart, for future life, was beyond my individual control.

At Christmas, 1844, I again hailed the Mississippi. I lived at St. Louis until 1851, and after that time in Sauk County (Wisconsin) tilling the soil and my mind.

- F. G. J. Lueders

He spent the rest of his life in Sauk City, Wisconsin, and engaged in many astronomical studies. In 1869 he had published in Hamburg "The Aurora Borealis and Law of Reciprocal Action in the Universe" and in 1884 the University of Wisconsin published his observations on a number of Auroras which he had studied. Privately, Lueders also published a pamphlet "Memoirs on Physical Astronomy." For many years he was city treasurer of Sauk City. He died December 21, 1904.

Thus a botanical disaster prevented Lueders' name from being associated with Northwest botany. Had his specimens been properly reported, there is no doubt that his name would have been linked with species of western plants. Lueders' Bay, named by Fremont, is also a lost geographical name. One can only speculate on its location, and as the large dams on the Columbia are changing the topography along the river, Lueders' Bay itself may no longer be in existence.

> Portland State College, Portland, Oregon

ROBERT HIBBS PEEBLES¹

The death, last March, of Robert Hibbs Peebles, one of the world's leading cotton breeders and an outstanding student of cotton genetics, was a great loss to southwestern agriculture. He was the originator of what had become, in recent years, the preferred variety of Pima (American-Egyptian) long-staple cotton, and carried on investigations of the inheritance of various characters of this very important crop-plant. Toward the end of his career he was working on the problem of how to insure the greatest possible degree of natural cross-pollination, in view of the fact that artificial cross-pollination of cotton varieties usually increases the yield, as compared with that of either parent. The endeavor was to do, with cotton, what has been done so successfully with hybrid corn.

¹ This paper was in press at the time of Dr. Kearney's death on October 19, 1956. —ED.



Fig. 1. Robert H. Peebles at his home, Sacaton, Arizona, Christmas Eve, 1944.

The University of Arizona, recognizing the great value of Peebles' contributions to the agriculture of the state, conferred upon him an honorary D. Sc., less than a year before his untimely death, at the age of 55. He was also given, posthumously, the United States Department of Agriculture's Superior Service award and medal.

To taxonomic botanists, Dr. Peebles was well-known as an ardent student of the native flora and co-author with me of "Flowering Plants and Ferns of Arizona" (1942) and "Arizona Flora" (1951). For two decades he devoted many of his week-ends to plant collecting in all parts of the state and added substantially to the number of species known to occur there.

He was especially interested in the Cactaceæ, which are such a conspicuous element of the Arizona flora, and he became a recognized authority on that family. The technique which he developed for preparing herbarium specimens of cacti has never been excelled. Some readers of this notice will recall his exhibition of specimens and photographs at a meeting of the California Botanical Society in April, 1953. His name is commemorated in that of the remarkable and very rare little cactus, *Navajoa Peeblesiana* Croizat. The many friends of Bob Peebles will remember him always for his vivid and lovable personality. He was so very much alive that we can scarcely realize, even yet, that he is no longer with us. He has left a void that will be very hard to fill.—Thomas H. Kearney, California Academy of Sciences, San Francisco.

THE CHROMOSOMAL AND DISTRIBUTIONAL RELATIONSHIPS OF LUPINUS TEXENSIS AND L. SUBCARNOSUS (LEGUMINOSAE)

B. L. TURNER

The genus *Lupinus* is represented in Texas by several species (Shinners, 1953). Of these, the two most commonly encountered are *L. texensis* Hook. and *L. subcarnosus* Hook. The latter taxon is the official state flower of Texas, though *L. texensis* is sometimes mistaken for this species. Both species are endemic to the state and are known locally as bluebonnets. They are probably the most important native rangeland legumes in central Texas, often occupying hundreds of acres of rolling hillsides during the early spring months. The roots of these species are highly nodulated and are undoubtedly important soil nitrifiers. In addition, *L. texensis* has become a popular garden ornamental in many parts of the world. (Although many trade catalogues list *L. subcarnosus* as the Texas bluebonnet, most of the material on the open market appears to be *L. texensis*.)

Geographical Distribution

Lupinus texensis occurs naturally on open calcareous soils throughout central Texas. Lupinus subcarnosus is restricted to sandy soils of southcentral Texas. The interfingered distribution of the two species (Fig. 1) can be related to alternating grassland — forest strips which occur on deep clay and sandy soils respectively. The ecotone between these vegetative types is sharp, and consequently both species may be found growing in close proximity along many miles of the contact area. Lupinus texensis has a wide ecologic amplitude and may grow in a variety of disturbed soil types. As a result, the species has become established along road shoulders which cross the otherwise unoccupied sandy lands, particularly as a result of deliberate sowing by state highway workers and other wildflower enthusiasts. Lupinus subcarnosus is rarely if at all sown along highways, and in no instance has the author seen the plant growing naturally on clay soils or along highways in such areas. In the numerous cases where both species were found growing together during the spring of 1955, no sign of morphologic intergradation, meiotic irregularity, or other evidence of hybridization could be detected.